Pacific Gas and Electric Company™

October 26, 2007

Charles McGlashan, Supervisor, District 3
Board Vice President
County of Marin
3501 Civic Center Drive, Suite 329
San Rafael, CA 94903

Dear Supervisor McGlashan:

We thank you for the opportunity to review and evaluate the Marin Community Choice Aggregation (CCA) Business Plan Draft Report dated September 2007 (referred to hereafter as the "Report"). PG&E supported the concept behind AB117 which created the opportunity for local public agencies to acquire power for their residents, businesses and municipal facilities and believe it is our responsibility to our customers to evaluate local proposals for CCA programs to determine whether or not the proposals can deliver the promised benefits. After review of the Report, PG&E is concerned whether a CCA operating by a Marin Power Authority (MPA) could meet its goal of achieving a significantly higher percentage of renewable power than is currently available from PG&E electric service without the risk of higher rates compared to those being offered by PG&E.

Like Marin County, PG&E recognizes that climate change threatens to significantly alter the environment for current and future generations. As such, while PG&E delivers some of the cleanest electric power in America with more than 50% of the energy being carbon emission free, we are continuing to increase our renewable energy portfolio. We are excited that the County is pursuing a number of strategies to reduce greenhouse gas emissions, including addressing the electricity sector which represents approximately 10% of county-wide emissions. However, if Marin were to assemble an independent power portfolio comprised of 50% renewable power, how much reduction in overall greenhouse gas emissions could be achieved? The Report also proposes the use of renewable energy credits (RECs) as a means of achieving its emissions goals; this suggests that the MPA's power mix would likely be less clean than PG&E's supply.

PG&E believes the Report's key conclusion, that a Marin CCA could achieve a significantly higher percentage of renewable power than is available from PG&E electric service at rates that are at, or below, PG&E's generation rate, is unsupportable, since:

- Renewable power necessary for the MPA to construct a power portfolio which will meet 50% of MPA's annual energy needs is in very short supply given the acute worldwide demand for the equipment needed to capture the resources combined with the intermittent nature of the resources, challenges to siting renewable projects, and their remote location with limited transmission access.

- Renewable power supplies are much more expensive than seems to be implied by the Report's presumption that they can be blended with conventional supplies at a price that will meet or beat PG&E's generation rate.
- Even for the short period of time shown in the Report (2009-2011; see table on page 54), it appears to overstate PG&E's expected future generation rates. Furthermore, the Report fails to account for the fact that part of the PG&E generation rate charged to its customers in Marin will likely still be paid by customers served by the MPA.

We also believe that the Report's conclusion is *unsupported* because the Report does not include:

- Any comprehensive analysis of the cash flow and/or financial *pro formas* that policymakers and customers would need to decide the feasibility of establishing an (MPA).
- Sufficient load data analysis to evaluate the load requirements of the County and cities. The Report totals only kWh sales by town and rate class (rather than hourly load data) and oversimplifies the power supply needs.
- A detailed analysis of the cost of constructing an entirely new supply portfolio, with the renewable characteristics described in the Report, in order to reliably serve the needs of Marin's residents and business.
- A detailed analysis of the risk of making investments in renewable (or conventional) supplies, combined with the uncertainty of load which might opt-out of the MPA and thus render some portion of these investments stranded.
- A description of the wide variety of activities that the MPA will have to undertake to serve retail customers, along with the associated costs.
- A comparison of the renewable content and carbon emissions reductions that the MPA would likely achieve versus those of PG&E's portfolio.
- A more thorough examination of PG&E's estimated future generation rates, which are the benchmarks against which the MPA's generation costs, will be compared.

The following information highlights the Report's critical issues that will have major implications in the decisions of local policymakers and the public regarding the proposed CCA plan. PG&E is providing these comments on the draft Report notwithstanding the fact that critical information listed above is lacking, specifically Appendix B which is to contain the financial *pro formas* which support the Report's conclusions that the MPA can offer a portfolio which includes 51 percent renewable power, charge rates which meet or beat those of PG&E, yet remain financially viable. As currently constituted, the Report essentially presents a series of assertions without the necessary supporting analysis. PG&E would be happy to provide additional comments once the Report is revised to include substantiation of its claims.

1. MPA's Future Power Supply Options

The Report contemplates that power purchased from utilities, power marketers, public agencies, and/or generators will be the MPA's exclusive source of power from 2009-2012 and will remain the predominant source of supply after MPA's own renewable generation begins producing electricity, anticipated to be 2013. This purchased power will be acquired under arrangements where the supplier will be responsible for procuring a mix of power purchase contracts, including specified renewable energy targets, resource adequacy requirements, deliverability requirements, and congestion charges that might result under the

California Independent System Operator's Market Redesign and Technology Upgrade (MRTU) program.

a. ***Availability of Renewable Resources*** — The MPA goal is to achieve a mix of renewable power that significantly exceeds 20%, the current requirement for CPUC jurisdictional entities including Investor-Owned Utilities such as PG&E and CCAs such as MPA. The Bay Area Economic Forum (BAEF) 2007 report entitled *The Economics of Community Choice Aggregation* states, "The limited availability of renewable generation such as wind and geothermal, and the fact that much of that capacity will be heavily competed for by IOUs and other utilities that are also seeking to expand their renewable energy portfolios (to meet the Renewable Portfolio Standard), suggests that securing these resources may also be difficult."[1] Similarly, in reviewing the San Francisco proposal for achieving a 51% renewable share of its supply, the San Francisco Office of the Controller stated: "It is unlikely that private market participants would participate in a bidding process that would require them to match PG&E's rates while relying on a significantly higher share of more costly renewable energy than PG&E."[2] The same report goes on to say: "Given the current generation cost profiles associated with all forms of renewable energy, **the risk of a CCA provider not being able to meet or beat PG&E's rates is significant**. Thus, given the renewable requirements detailed in the implementation plan, even a competitive bidding process might not result in lower rates for San Francisco consumers. This raises the potential of an adverse economic impact."[3]

Supplier respondents to MPA's request for proposal will have difficulty lining up the needed renewable supplies since every load serving entity in California is straining to line up renewables to meet state mandated goals. The following chart shows historical levels of new renewables that have been brought on line in California since the year 2000.

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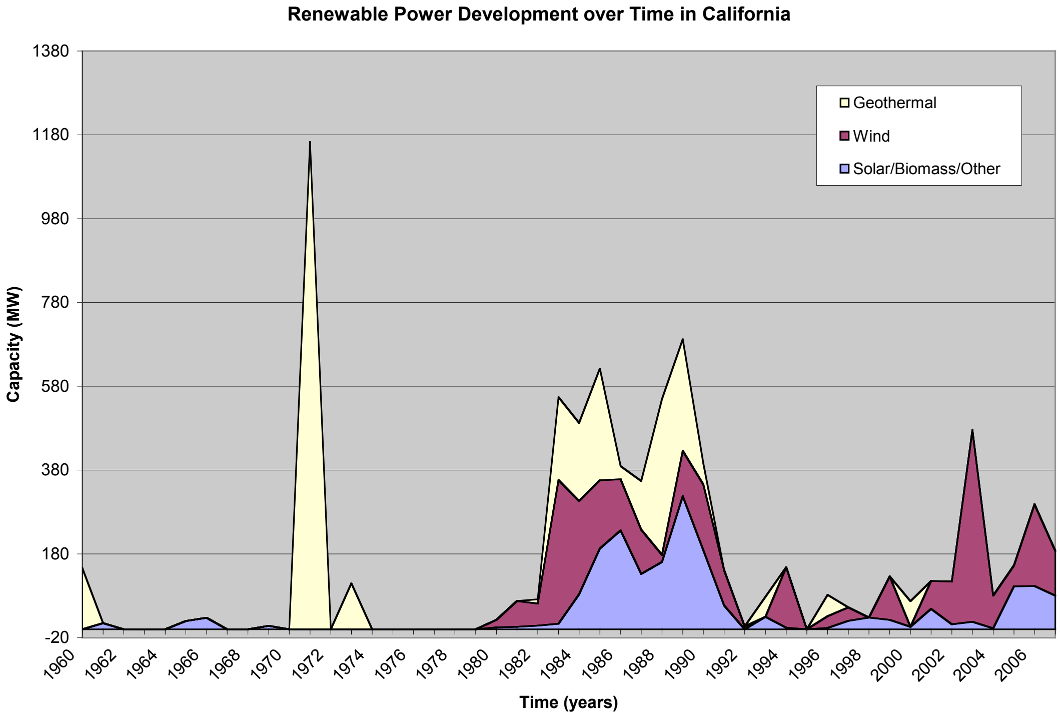
[1] See Bay Area Economic Forum (BAEF) 2007 report entitled *The Economics of Community Choice Aggregation,* pg. 26.
[2] City and County of San Francisco, Office of the Controller – Office of Economic Analysis, "Economic Impact Report," May 22, 2007, unnumbered first page of the report.
[3] *Id*., p. 12 (emphasis in original).



As shown, despite focused and aggressive efforts and high levels of contracting by load serving entities such as PG&E and Southern California Edison (SCE) to add renewable supplies to their portfolios, over the last several years there has not been a significant amount of renewable supplies added. Developers have found it difficult to locate and complete renewable projects. Difficulties encountered include:

- Many sites are in environmentally sensitive areas such as national forests and hence opposition to development is intense.

- Many sites are in remote areas that need expensive transmission lines to bring the power to the grid. The cost and environmental impacts of these transmission lines is problematic.

- Cost of certain renewable technologies, such as wind turbines, have greatly increased due to significant increases in the cost of materials resulting from a world-wide demand for these technologies. It is unclear when these costs may be reduced. Even if one is willing to pay the cost, delivery of equipment is undergoing significant delay with multi-year backorders.

- Many renewables provide a volatile output, resulting in the need for back-up capacity, additional ancillary service related costs, etc.

Should the MPA and/or its chosen supplier find possible new sites, there will need to be significant amounts of money invested in an attempt to license and finance such projects. Even after spending this money, many sites ultimately can not be developed. In January, 2006, a CEC consultant reported on a survey of utilities and government agencies in which 24 of 74 contracted renewable projects had been cancelled or defaulted, and a further 12 had been delayed.[4]

b. ***Cost of Renewables*** — The Report envisions that Marin could attain 50% renewable content essentially at costs that are comparable to or just slightly above conventional supplies, not accounting for how this will impact the cost of borrowing for other publicly funded needs, and some have suggested that 100% could be achievable at some relatively small premium. This is unrealistic based on the costs of renewables.

For example, the Report includes a proposal to build a 125 MW wind plant in 2013 at an installed cost of $1,488/kW. This cost figure is very low relative to recently published estimates. The California Energy Commission (CEC) in its report, *Comparative Costs of California Central Station Generation Technologies* (June 2007 draft) estimates that the "instant cost" of a wind plant built today is $1,900/kW. The installed cost, which includes financing costs during construction, is even higher. The CEC updated this figure at a California ISO meeting on October 15, 2007, stating that the installed cost of wind facilities in 2007 is now $2,000/kW. This figure appears in the table on slide 30 of the CEC's presentation, entitled "Comparative Costs of California Central Station Electricity Generation Technologies", which has been posted on the CAISO website at http://www.caiso.com/1c75/1c75c8ff34640.pdf.

The following anecdotes provide tangible support for this observed trend:

- **Turbines are scarce and costs are rising—**A prolonged shortage of wind turbines is pushing up prices for wind energy projects and forcing developers to scramble for deals long before construction begins. For example, GE has sold out of turbines until 2009[5].

- **Costs over $2,000/kW in Ontario—**A press release for Suncor Energy on September 20, 2007 stated, "Suncor Energy and Acciona Energy celebrate opening of first wind power project in Ontario…The $176 million Ripley Wind Power Project is a 38 turbine, 76 megawatt wind power facility near Ripley, Ontario." This $176 million project of 76 MW works out to $2316 per kW. (Note that the Canadian to US dollar exchange rate was about 1:1 in September, 2007).

- **Wind project in NYC cancelled due to cost increases—**The original estimates for a wind project in NYC were between $150 and $200 million in 2004. FPL Energy won the bid to build the project at $356 million. The project was cancelled a few months ago as the latest estimates put project at $697 million, and climbing—an increase of almost 250% (over the higher initial estimate of $200 million) in just three years.[6]

- **New Wind Costs Jumped 50 - 70 % over 2005 to 2006—**The Northwest Power and Conservation Council reported on June 29, 2007 that "The cost of new wind projects

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[4] See *KEMA, Inc*., Building a "Margin of Safety" Into Renewable Energy Procurements: A Review of Experience with Contract Failure, Jan. 2006 (http://www.energy.ca.gov/2006publications/CEC-300-2006-004/CEC-300-2006-004.PDF.

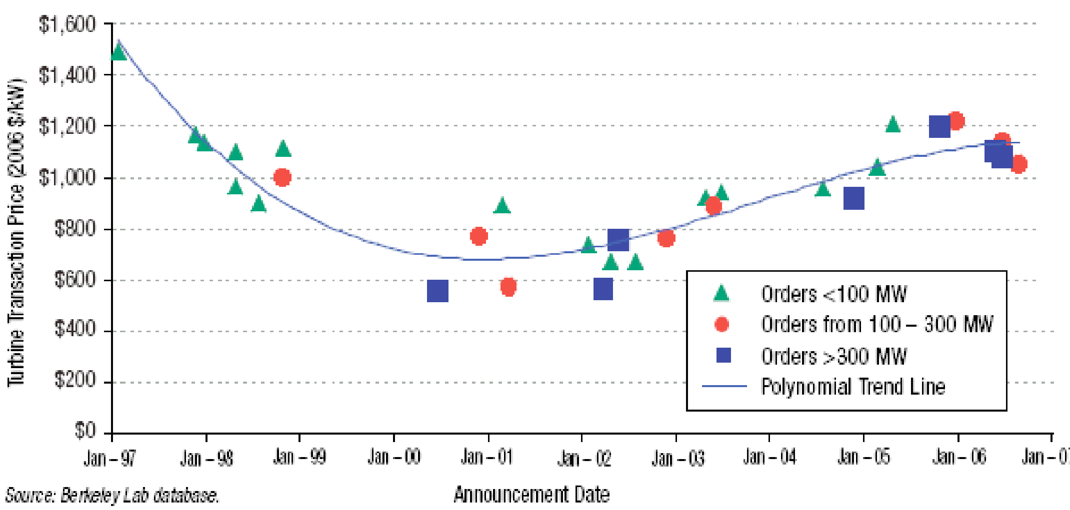
[5] See *The Oregonian*, "Turbines' shortage boosts wind-power costs" August 31, 2007.

[6] *USA Today*: "$700m wind power project scrapped in NYC area." August, 2007.

has risen substantially in real terms over the past two years." Levelized lifecycle cost of power from new wind projects rose 50-70 percent in real terms in the two years prior to July 2006. The principal element leading to the increase in delivered energy cost is an increase in project construction of 20-30% over the same period. The report's author indicated by phone on October 18, 2007 that two recent projects came in at or above $2,000 per kW.

Were the MPA to build such a plant several years out, the cost would likely be even higher. The CEC compared its current cost estimate with a similar estimate made in 2003 and found that the costs had increased over 50% in that four-year period. Additionally, the Department of Energy (DOE) has reported significant increases in the costs of the wind turbine itself—the key element of a wind power plant. The chart below, obtained from the 2006 "Annual Report on US Wind Power", shows the recent annual increases of $100/kW for just the wind turbine (i.e., excluding the other cost components of the wind power plant, including installation, and their associated cost increases):

Figure 2: Recent Trend of Wind Turbine Costs



According to the aforementioned CEC estimate of $2,000/kW, a wind plant built today would have an installed cost one-third greater than the Report estimates the same system would cost in 2013. If the wind turbine component continued to escalate in cost at recent rates, by 2013 the plant's installed cost would be $2,600/kW – almost twice the estimate in the Report. Even if the plant cost grew at only the recent growth in the Producer Price Index for turbine manufacturers – 3.7% annualized for the three years ending in May – the installed cost in 2013 would be $2490/kW. These estimates of the cost of a wind plant in 2013 are 67% to 75% higher than the cost estimate in the Report.

c. ***Procurement Costs***— In the previously-referenced report, the BAEF pointed out that it was unlikely that an aggregator would be able to offer prices below the utility's, especially if the utility's existing and contracted portfolio was below market. The BAEF report states, "The analyses in this report point to two key conclusions. First, if the incumbent utility owns and operates generation capacity, particularly capacity that generates below-market power, then a new CCA cannot reliably compete on average rates while purchasing all of its power supply in the competitive wholesale market."[7] The San Francisco Public Utilities Commission analysis of a similar CCA proposal found that in every case, even the scenarios with the most optimistic assumptions, "it is reasonably likely that the CCA customer bills would exceed those of PG&E" for at least the first several years, and longer if any of the optimistic projections aren't met; "However in all cases – in the early years (2006-2008 or 2009) – it is reasonably likely that CCA customer bills would exceed those of equivalent PG&E service."[8]

Recent experience with the Massachusetts and New Jersey default service solicitations indicate prices for the kind of service MPA needs are significantly higher than published market prices. For example, on February 5, an auction was held in New Jersey for round-the-clock, load-following, Basic Generation Service. The winning offer to supply PSE&G was 9.888 cents per kWh. This was 13 – 16 % higher than the Megawatt Daily <u>on-peak</u> forward prices reported on 2/5/07 for the delivery period of the auction. However, the actual premium paid is much higher, because the winning suppliers will receive 9.888 cents for all kWhs delivered 24 hours of everyday, both on- and off-peak. Off-peak market prices can be significantly lower than on-peak. Meeting all of the minute-by-minute load requirements is premium service that commands a premium price. That premium is significantly higher than prices for standard blocks of power such as those reported in the Megawatt Daily. The premium represents a number of risks, some that are listed below.

- Service is expensive to provide because it is load following. The supplier needs resources that will meet the load every minute of every day. However, in New England there are no penalties for imbalances (i.e., over or under deliveries which should reduce some of this risk; imbalances are settled at the LMP price).

- Supplier must provide or pay for all related ancillary services.

- Supplier is subject to fuel price risks.

- Customers are free to migrate to other suppliers.

- Suppliers will demand a profit that reflects the risks.

- Suppliers are responsible for the retail supplier Renewables Portfolio Standard (RPS) compliance. In Massachusetts, most power suppliers are meeting the RPS requirements by paying the RPS Compliance Payment, not purchasing renewable power. So, even though the public may believe they get some portion of their power from green resources, most of it comes from traditional sources. These are just financial transactions for the supplier.

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[7] See the Bay Area Economic Forum (BAEF) 2007 report entitled *The Economics of Community Choice Aggregation*, pg. 25,

[8] See Community Choice Aggregation Draft Implementation Plan April 27, 2005 Prepared Jointly by The San Francisco Public Utilities Commission and The San Francisco Department of the Environment, pg. 6.

d. ***Gas Price Risk vs. PG&E Gas Portfolio Exposure***—The Report appears to place the future of much of the Marin's CCA program in the hands of a third party that owns no power plants but rather intends to buy power on the market. MPA's power portfolios will in all likelihood have significant amounts of non-renewable supplies whose costs are strongly influenced by the price of natural gas.[9] Therefore, in spite of MPA's best intent to manage a PG&E-MPA rate spread, when gas prices increase, the rate increase for PG&E will likely be less than for the MPA. The respondent supplier may need to pass the natural gas price risk to MPA. The MPA power supply offers must be scrutinized carefully for the triggers that will allow price increases due to changes in fuel costs. The truth is, under the very terms of a CCA program, it is the cities and counties, and all their constituents, who bear the risks for dollars in costs and commitments that policy makers will make on their behalf. And consumers will likely be required to pay these costs through their CCA rates, or pay exit fees to MPA if they wish to return to PG&E.

e. ***Tax-Exempt Financing***—If MPA were to construct its own energy facilities, as the Report anticipates it doing,[10] MPA would benefit from its tax-exempt financing advantage and therefore reduce its energy cost, all other things being equal. However, all other things are not equal. Financing costs are only one element of the total cost of power supplies, renewable or otherwise. Private developers, for example, receive other tax benefits – production tax credits and investment tax credits – that are not available to an entity that pays no taxes. Installation costs can vary widely, depending on site characteristics and permit requirements, and operating and maintenance costs for power production facilities will also differ across plants. The above-referenced BAEF Report noted that variability in load (given the opt-out nature of CCA) presents an additional significant risk to the substantial government capital investments associated with CCA plans such as those described in the Report. The BAEF Report states, "While CCA financing may be tax exempt, it remains to be seen what impact the CCA's uncertain customer/revenue base will have on its ability to obtain bond or other debt financing under favorable terms. Should financing costs increase, the CCA could be forced to raise its rates to cover the necessary debt service."[11]

2. **Estimated Cost of Power from a Proposed MPA --** In the early years of operations, when MPA is proposing a 25% renewable share, the cost of MPA's proposed power portfolio is likely to be much higher than the Report estimates. PG&E believes that the cost spread will increase even further when Marin proposes to provide over 50% of its power supply from renewable sources; in or around 2013. However, given that the Report only shows estimated costs through 2011, PG&E will provide its analysis for these later years once the additional information is provided by Navigant.

   Table 1 presents estimates of MPA's power and other costs based upon 2008 cost information and compares MPA's total estimated cost of service to PG&E's expected generation rate for the mix of customers in Marin County.

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[9] The Report states that initially 75% of the power will be non-renewable and purchased from the market, and even from 2013 on it contemplates that 49% will be non-renewable and purchased from the market.
[10] The Report assumes a 125 MW wind plant will be built by MPA and brought on line in 2013.
[11] See the Bay Area Economic Forum (BAEF) 2007 report entitled *The Economics of Community Choice Aggregation*, pg. 9.

Table 1. MPA Power Costs vs. PG&E Estimated 2008

Non-renewable base-load power	8.9 c/kWh
Renewable power	8.9 c/kWh
Peak power premium	1.1 c/kWh
Average cost of power (all-hours)	10.0 c/kWh
Line loss adjustment (7%)	0.7 c/kWh
Marin non-energy costs	0.3 c/kWh
Scheduling coordinator costs	TBD
Estimated MPA Generation Rate	11.0 c/kWh
PG&E average rate at Marin profile	8.7 c/kWh
Additional cost of MPA power	2.3 c/kWh

Each line item is explained below:

- Non-renewable base-load power: The source of this estimate is the recently issued Market Price Referent (MPR) Ruling from the CPUC (Resolution E-4118, issued October 4, 2007). As stated by this Resolution, one of the key purposes of the MPR is to: "deem reasonable per se and allow to be recovered in rates those '[p]rocurement and administrative costs associated with long-term contracts entered into by an electrical corporation for eligible renewable energy resources pursuant to this article, at or below the market price determined by the commission pursuant to subdivision (c) of Section 399.15…."[12] PG&E selected the cost of power for a 10-year levelized term beginning in 2008, excluding the greenhouse gas adder that the CPUC presumed would be imposed starting in 2012.

- Renewable power: As described above, the available supply of renewable power projects has been quite limited, and the cost of renewable power has recently increased significantly. Based on the CEC's *Comparative Costs* report, the cost of power generated by renewable resources in 2008 should be *at least* $89.10/MWh (the lowest cost figure cited in the CEC report for a merchant-built renewable power project over 2 MW in capacity, escalated at 2% for inflation from 2007 to 2008). It is very likely, however, that renewable power supplies will continue to become significantly more costly, and exceed the MPR by a substantial margin. However, for current purposes PG&E is conservatively assuming that the costs of renewable supplies for 2008 would come in at the MPR.

[12] Resolution E-4118, pp. 2-3.

- Peak power premium: The MPR is a reasonable estimate of the cost of base-load power provided by conventional generation resources. However, MPA will also have to procure additional higher cost resources to meet peak demand. Power from resources used to meet peak-period demand is typically more costly than base-load power, because the resources used to meet peak demand are less efficient (i.e., have higher heat rates) and therefore are operated much less frequently than MPR-type resources used to meet baseload demand. This premium is estimated at $10.6/MWh.

- Average cost of power all-hours: This is a weighted average of non-renewable base load power (with a 75% weight) and renewable power (with a 25% weight), plus the peak power premium.

- Line losses: As noted in the Report, more power needs to be procured than is ultimately consumed, in order to account for losses in transmitting and distributing the power. The Report assumes that line loss rate will be approximately 7%, which PG&E has accepted for the present purpose.[13]

- Scheduling coordinator costs: Although no specific value is being provided at this stage, a power supplier, in its role as a scheduling coordinator, will incur certain costs assessed by the California Independent System Operator (ISO). There are 16 such grid management fees that the ISO charges generators. PG&E will develop an estimate of these costs when more detail to the Report is provided.

- Non-Energy Costs: Finally, Marin's rates would include the administrative costs associated with set-up, power procurement, meter reading and billing fees, and other related activities. According to estimates in the Report, this translates into approximately $3/MWh.[14]

- Estimated MPA Generation Rate: This rate is the sum of the average cost of power all-hours, line losses, scheduling coordinator costs, and non-energy costs.

- PG&E average rate at Marin profile: The estimate of PG&E's generation rate is based upon its rate filing made on October 22, Advice Letter 3136-E, for rates effective January 1, 2008. These rates were then applied to the population of PG&E customers in Marin County in order to obtain the average 2008 generation rate specific to Marin.[15] PG&E conservatively assumed that the negative PCIA rate would offset the ongoing CTC non-bypassable charge in estimating a "target" rate against which MPA would be competing.

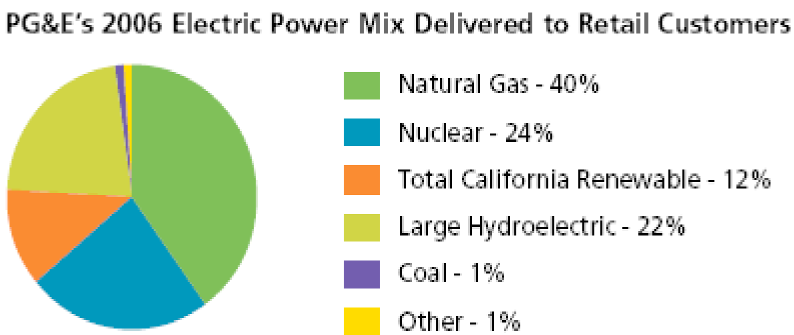
In summary, if the Marin CCA to be providing power at 2008 costs, it would be charging customers an average rate of $110/MWh. In comparison, the estimated PG&E generation

[13] See table in Report on p. 37.
[14] This figure is obtained by dividing the $3.64 million A&G cost figure for 2010 (the first year of full program operations) from the table on page 56 of the Report by the 2010 retail demand figure of 1,290 GWh/year from the table on page 37.
[15] Even though it is comparing MPA's cost versus PG&E's generation rate in 2008, PG&E calculated the latter based upon the complete mix of customers in Marin, in order to reflect the fully-operational state of the program (which, per the Report, would not occur until 2010).

rate for the customer mix in Marin, including the negative PCIA, is $87/MWh. It appears that even in the early years, when MPA's planned portfolio only includes 25% renewables, its likely costs exceed PG&E's generation rate by $23/MWh, or 26%. Moreover, this is a conservative estimate that does not account for the fact that the PG&E generation rate will likely include a portion that will be deemed by the CPUC to be non-bypassable, because it is associated with above-market costs of "new world" generation resources that PG&E has added to its portfolio since 2004.[16] In other words, the MPA would need to charge some amount less than $87/MWh in order for customers to not see a generation rate increase under the CCA.

3. <u>Increase in Green House Gas (GHG) Emissions</u>

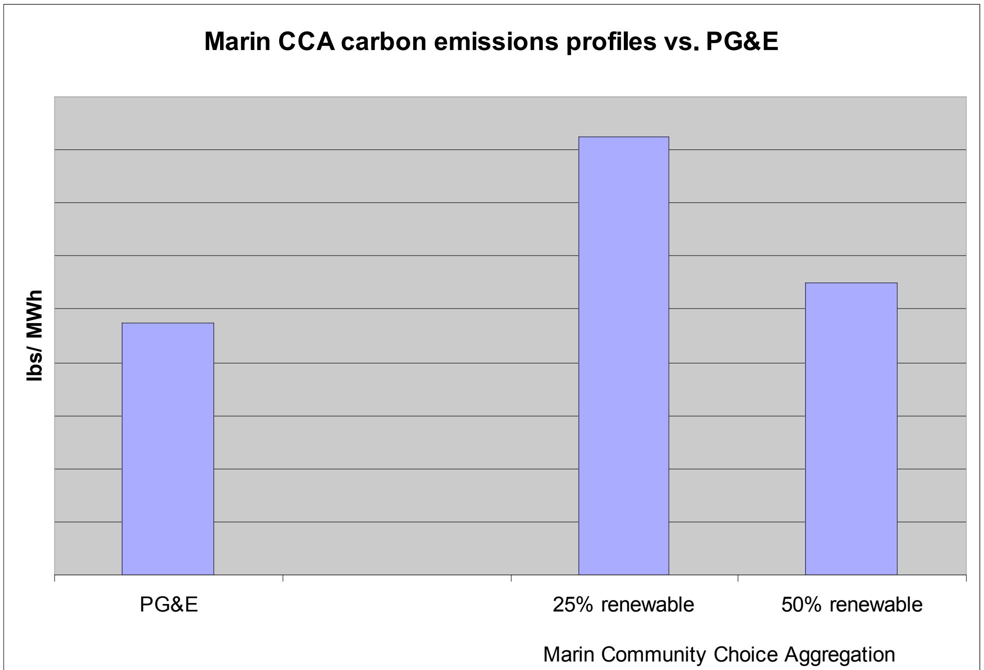
a. ***PG&E's GHG Portfolio***—PG&E's CO_2 emissions from its electric portfolio is well below both the national average and California's average. In fact, 58% of the energy PG&E supplied to customers in 2006 came from sources whose operation emits no carbon dioxide:



Marin policymakers will need to understand how prospective suppliers plan to obtain their generation. It is crucial for elected officials to know whether the supplier's power is being generated from specific units, and if so, what the emissions rates of those units are. If suppliers source from "unspecified" out of state resources, otherwise known as "system" power, they are likely getting some energy from out-of-state coal plants. In that event, the generating facilities which run to support Marin County could very likely be, on average, much more GHG intensive than the resources that are used by PG&E.

The table below illustrates how, even if the MPA were to source 50% of its power from renewable sources, its carbon emissions would still be high compared to PG&E's. The table uses the reporting protocol from Decision 07-09-017 at the California Public Utilities Commission to estimate what Marin's emissions profile would be.

[16] In Rulemaking 06-02-013, the Commission is currently determining the amount of this "new world" non-bypassable charges – but it has already, in previous decisions (Decision 04-12-048 and 06-07-029), determined that it will be owed by all community choice aggregation customers.



Note: Emissions profiles for Marin CCA assume that non-renew able electricity is system pow er. The California Air Resources Board, in its draft regulations for reporting for AB 32, is using 1,100 lbs/MWh for system pow er, as adopted by the California Energy Commission and California Public Utilities Commission.

The Report states that a Marin CCA would be able to reduce greenhouse gas emissions by approximately 174,000 to 308,000 tons/year by providing 50% renewable supply by 2017 Unless the renewable resources supplying Marin are newly built, Marin will simply be paying to purchase generation that would have run anyway. Marin will be paying money for no new GHG reductions. Even if new renewables can be built in the timeframe suggested, Marin will need baseload resources and natural gas based power to supplement the renewable energy. If the baseload contracts are from out of state, Marin is very likely purchasing coal based power. Thus, even with a 50% renewables target, Marin could end up using power that is dirtier than what is supplied by PG&E.

b. ***Renewable Energy Credits (RECs)***—A REC is a certification that one MWh of electricity was produced from a renewable generator. RECs allow for the green attribute of the production to be separated from the energy. Power marketers offering renewable power are likely to deliver nonrenewable power from the market, add RECs, and call it green power. MPA would then be treating RECs equal to renewable energy. The REC-based renewable energy may not be offsetting GHG emissions and does not represent new renewable projects dedicated to serving California. An example of this is the Green Power program offered by Cape Light Compact in Massachusetts. Its green power program is all RECs, with no actual power from renewable sources that it owns or from which it buys power. In contrast, the renewable energy PG&E procures to meet the RPS must be delivered to California and serves to create new renewable projects.

Under current CPUC regulations, RECs cannot be used to fulfill RPS requirements, so MPA would have to purchase (or generate) RPS-compliant energy from renewable facilities to meet that requirement. However, MPA could use RECs to "green" some portion of its load beyond 20%, and the Report identifies RECs as one source of renewable supply. However, there are a number of issues associated with the use of RECs. These include claims about the carbon content of the replaced power and the potential for double counting production from renewable facilities. An example of double counting is the local utility in Hull, Massachusetts, which has wind supplies. Apparently, this community sold the RECs from its wind facility to another entity (Harvard University), and both now claim that their power is green.[17]

If Marin can be assured that the RECs it buys contribute to building new renewables and are not double-counted, then RECs could be an option to "green" the 50% fossil portion of PG&E's portfolio, producing effectively 100% greenhouse gas-free energy for Marin. This option would produce greater results, with a simple, much less risky alternative for Marin County than pursuing CCA.

4. Additional Observations

a. ***Bureaucracy and Scale*****—**A large scale supply contract requires careful and continuous oversight; it is not prudent to allow an energy supplier to manage or oversee itself. The Business Plan proposes to set up an MPA organization that will ramp up to some 20.5 staff at an estimated annual fixed operating cost of some $3.6 million ($2.5 million for staff and infrastructure plus $1.1 million for contractors).

This department will essentially provide energy procurement services provided by PG&E today at an estimated annual cost to Marin ratepayers of $726,000.[18] Because these services are included in the generation rate, MPA would not be double-paying, merely replacing a relatively low-priced service with an expensive one.

The learning curve in managing energy procurement, particularly load forecasting and planning, is not to be underestimated. MPA will most likely need to outsource these services which involve an expensive 24 x 7 operational element.

b. ***Misinformed Statements About Solar*****—** Page 31 of the Report states:

> The resource plan also sets forth ambitious targets for improving customer side energy efficiency as well as for deployment of approximately 14 MW of new distributed solar capacity within the jurisdictional boundaries of the Authority by 2018 (year ten of Program operations).

PG&E believes that 14 MW of new distributed solar capacity – and likely a lot more -- will occur whether or not Marin chooses to form the MPA. The solar installations will occur as a result of the California Solar Initiative, which is administered by PG&E in Marin County.

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[17] See Harvard University Gazette, "Harvard to purchase renewable energy credits-*Agreement supports wind power generation from Hull*" June 15, 2006.
[18] Estimate based on 2007 GRC Settlement budget of $42.7 million for Electric Supply Administration pro rated to Marin's 1.7% share of total PG&E load. Source: PUC Decision 07-03-044, March 15, 2007, page 111.

Prior to 2007, Marin residents installed about 7 MW of solar generation through the Emerging Renewables Program (ERP), administered by the California Energy Commission and the Self Generation Incentive Program (SGIP) administered by PG&E. For 2007 and beyond, both of those programs have been replaced by the California Solar Initiative (CSI). Under the CSI, PG&E expects our customers to install approximately 750 MW of customer-based solar in the next 10 years. Since Marin County represents 1.7% of PG&E electricity sales, on a pro rata basis we could anticipate 12.58 MW of solar installations in Marin County as a result of the CSI program. However, Marin county residents have installed, and continue to install, a greater proportion of solar MW than the PG&E system average. Thus far in 2007, PG&E customers have installed almost 12 MW of solar capacity through the CSI program. More than 5%, about 0.6 MW, was installed in Marin County. Historically, under the ERP and the SGIP program, Marin installations also accounted for about 5% of total customer installations. If this pattern continues, PG&E customers in Marin County could be expected to install 37 MW of solar by 2017 -- with or without the existence of the MPA.

Page 34 of the Report contains a discussion of the tariffs under which customers installing solar generation take service from PG&E. PG&E is not sure the authors of the Report understand the tariff implications for customers who are on net metering and who participate in PG&E's California Solar Initiative Program. The discussion creates a negative impression about time-of-use (TOU) rates that is misleading and which does not apply to PG&E's TOU rates. Currently, residential customers who install solar generation and receive rebates from PG&E can elect to go on a TOU rate, if they wish. To date in 2007, about 80% of our individual residential customers make such an election—even though they are no longer legally required to sign on to a TOU rate. This is because PG&E's existing TOU rate options (E-7 today and E-6 starting January 1, 2008) produce very favorable economics for solar generation. Nonresidential customers with demand less than 500 kW can elect service under PG&E's A-6 rate, which also has very favorable economics for customers with solar installations. The E-7, E-6 and A-6 rates all have a high differential between on-peak and off-peak prices, which means the solar generator will be operating at the time that is most cost-effective for the customer. Further, the A-6 rate is a non-demand rate that was recently extended to customers with demand between 500 kW and 1,000 kW on a pilot basis.

c. ***Impact on Energy Efficiency Programs--***Although no specific detail is provided on the plans for a Marin CCA to provide energy efficiency services (page 48 provides a "To Be Provided" placeholder), page 2 of the Report declares: "The Authority would promote additional energy efficiency efforts and ultimately seek to administer all energy efficiency programs within its jurisdiction, as envisioned by AB 117." PG&E is not aware of any provision of AB 117 that "envisions" that a CCA would automatically administer all energy efficiency programs within its jurisdiction. In fact, the CPUC has addressed this very issue on several occasions.

The Report is correct that AB 117 included provision for a CCA to seek to become the administrator for energy efficiency programs. Specifically, Section 381.1(a) requires that: "No later than July 15, 2003, the commission shall establish policies and procedures by which any party, including, but not limited to, a local entity that establishes a community choice aggregation program, may apply to become administrators for cost-effective energy efficiency and conservation programs established pursuant to Section 381." The CPUC issued a decision in 2003 regarding the provision within AB 117 relating to CCAs and the administration of energy efficiency programs.

In D.03-07-034, the Commission ruled that the **existing** Third Part Programs satisfied the legislative mandate. Specifically, the CPUC stated:

> "The Commission's existing policies and procedures for selecting energy efficiency programs and administrators (or "implementers" as defined by the Commission's energy efficiency policy manual) generally fulfill those portions of AB 117 that require the Commission to permit non-utilities to apply for program funding and that articulate policy criteria for selecting programs to be funded with revenues collected pursuant to Section 381." (Finding of Fact 2)
>
> "The record in this proceeding does not support providing a preference for cities, counties or CCAs to be awarded energy efficiency program funding at this time." (Finding of fact 3)

In 2005, when the CPUC determined that PG&E should continue to administer energy efficiency programs to its customers, the Commission revisited the issue of CCA administration. In D.05-01-055, the CPUC upheld its earlier determination.[19]

To date, customers in Marin County have benefited significantly from PG&E's renowned energy efficiency programs. From 2000-2006 customers in Marin County have received over $4.6 million in rebates from the electric Public Purpose Program (PPP) funds for energy efficiency and saved over 46 million kWh. The energy savings by PG&E customers in Marin County translates to a reduction of 25,394 tons of CO_2 emissions during this seven year period.

Should MPA seek and obtain PPP funding to design and implement its own energy efficiency programs, PG&E believes it will not possess the expertise or scale necessary to provide the depth or breadth of energy efficiency programs provided by PG&E. PG&E believes the best results can come through integration of the County's community ties with PG&E's energy efficiency expertise.

d. ***CCA Program Termination***—The Business Plan indicates that funds would be collected and held in reserve to pay for switching customers back to PG&E service, however, the plan does not appear to estimate how big these fees might be or how they will be collected. This is obviously an important factor for prospective MPA customers to consider in deciding whether or not to opt-out of the program. Further, the "Program Termination" discussion in the Report does not address who might be responsible for liabilities MPA may have at termination. Such liabilities may be a result of (a) moneys MPA may need to pay supply contractors if it prematurely terminates Power Purchase Agreements, (b) debt obligation of MPA related to borrowings for renewable power plants that do not perform as planned, (c) environmental clean up activity that may be

[19] D.05-01-055, pp. 85-87.

needed for MPA-owned assets, (d) costs to protect PG&E's customers from any financial consequence of Marin customers being returned to PG&E bundled service, etc.

e. ***Ratemaking Risks*** -- Ratemaking is a delicate art with potentially severe consequences if mishandled in a competitive environment. Rates must be constructed in a manner that allows a load serving entity -- whether PG&E or an MPA -- to meet its revenue requirement. This will be particularly important as Marin makes long term contract commitments and plant investments.

   At present, PG&E's residential generation rates are strongly affected by the rate freeze enacted by the state Legislature under AB1X, which has kept Tier 1 and 2 rates at levels well below the cost of serving these customers. This has meant that rates for the remaining high-use tiers have had to be far in excess of the cost of service. In effect, high-use customers are heavily subsidizing low-use and CARE customers.

   Marin has indicated that it intends to match PG&E's rate structure initially in order to maximize participation in the CCA. However, it should be aware that for as long as this persists, its high use customers will bear the brunt of any unforeseen cost increases. These could add up to hundreds or even thousands of dollars or more per high use customer per year.

Conclusion
While PG&E supports Marin County's progressive efforts to pursue policies that will help reduce greenhouse gas emissions in as cost-effective a manner as possible, PG&E believes that the CCA proposal described by the Report would not be successful in achieving its stated objectives.

PG&E has risen as a leader that believes in and acts to reduce green house gases (GHG) and believe that there are a number of important partnership opportunities that could help Marin achieve its goals without the more costly and risky approach described by the Report. As such, we urge you to take seriously the issues we have identified and look forward to meeting with you to discuss these details.

Sincerely,

John Newman
Public Affairs Director

cc: Susan L. Adams, Marin County Supervisor, District 1
Harold C. Brown Jr., Marin County Supervisor District 2, 2nd Vice President
Steve Kinsey, Marin County Supervisor District 4, Board President
Judy Arnold, Marin County Supervisor District 5
County Administrator Matthew Hymel